

Bellwork: 1/15/13

- 1) Find the quadratic equation that has roots of $-\frac{3}{4}$ and $\frac{5}{2}$.

Roots: $-\frac{3}{4}$ $\frac{5}{2}$

Factors: $(4x+3)(2x-5)$

$$8x^2 - 20x + 6x - 15$$

$$8x^2 - 14x - 15$$

Equation: $8x^2 - 14x - 15 = 0$

TOP: $(6-5i)(3+2i)$
 $18 + 2i - 15i - 10i^2 + 10$

2) Divide
 $28-3i$

$$\frac{6-5i}{3-2i} \cdot \frac{3+2i}{3+2i} =$$

Bottom:

$$(3-2i)(3+2i)$$

$$9 + 6i - 6i - 4i^2$$

$$(13)$$

$$\frac{28-3i}{13}$$

